



National Coastal Assessment Program

Role of the New Jersey Marine Sciences Consortium

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Water Monitoring Council
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www.NJMSC.org

NJMSC: Who Are We?

- Twenty-Six Member
 Colleges and Universities
- Founded in 1969
- Research, Education and Outreach

NJMSC Member Institutions

Atlantic Cape Community College

Brookdale Community College

The College of New Jersey

County College of Morris

Cumberland County College

Fairleigh Dickinson University

Georgian Court College

Kean University

Middlesex County College

Montclair State

Monmouth University

New Jersey City University

New Jersey Institute of Technology

Princeton University

Ramapo College

Richard Stockton College of New Jersey

Rider University

Rowan University

Rutgers, the State University

Saint Peter's College

Seton Hall University

Stevens Institute of Technology

Union County College

University of Medicine and

Dentistry of New Jersey

Associate Members:

Academy of Natural Sciences of

Philadelphia

American Littoral Society

Marine Academy of Science and

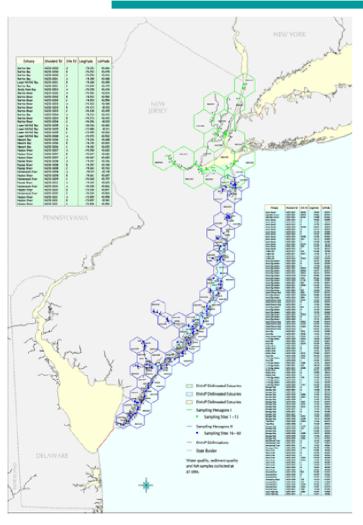
Technology

NJMSC: How Are We Organized?

Four Divisions:

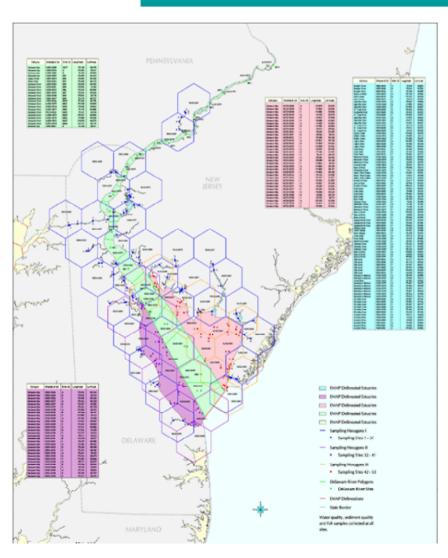
- Marine Research
- Education Department
 - K -1 2
 - Undergraduate/Graduate
- Marine Operations Department
- New Jersey Sea Grant College Program (Designated in 1989)
 - Comprehensive Research
 - Marine Advisory Services
 - Sea Grant Education

National Coastal Assessment New Jersey Sampling Sites



- 30 Stations
- Coordination with NJDEP Bureau of Marine Water Monitoring Water Quality Stations
- •NJDEP Bureau of Marine Water Monitoring Leeds Point Laboratory Conducted Analysis of Water Samples for Nutrients, Chlorophyll and Total Suspended Solids

National Coastal Assessment Delaware Bay Sampling Sites

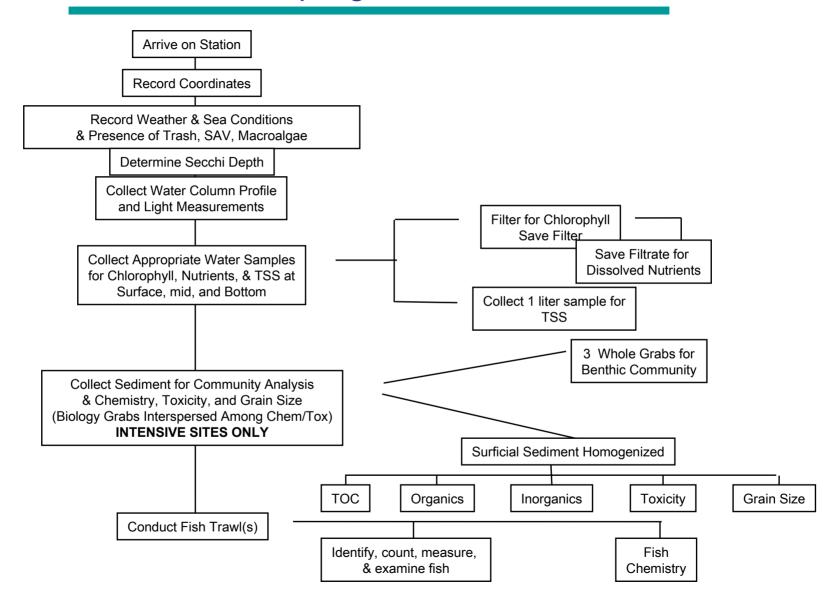


- •39 Stations
- •3 States
- •Coordination with Delaware River Basin Commission (DRBC) Water Quality Monitoring Stations

National Coastal Assessment Indicators

Water Quality	Sediment Quality	Fish and Benthos
Dissolved Oxygen, Salinity, Temperature, Depth, pH, Nutrients, Chlorophyll	Grain Size, Total Organic Carbon, Sediment Chemistry, Benthic Community Structure, Sediment Toxicity	Community Structure External Pathology Tissue Analyses

Flow Chart of Sampling Activities at NCA Stations



Research Vessel Lionel A. Walford



Lessons Learned



- Adjust Station Location within 0.02 nm of the Assigned Latitude and Longitude to Ensure Complete Data Collection at the "A" Station
- Dominant Sediment Type Used to Determine Grab Make and Model Selection
- •Adjust the Number and Length of Target Species for Chemical Analysis Based on Catch

Benefits of the National Coastal Assessment Program

- 21st Century Science/Math Teacher Skills Project
- Internship Opportunities for Undergraduate Students
- Graduate Student Research Report
- NOAA Research Support
- Delaware River Basin Commission Research
- Brown Tide Monitoring
- New Jersey Sea Grant College Program Development Grant
- Index of Biotic Integrity (IBI)